

REMARKS

Claims 1-13 are all the claims pending in the application.

I. Claim Rejections under 35 U.S.C. § 103(a)

Claims 1-13 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Yamamoto et al. (Adaptive internally turbo-coded ultra wideband-impulse radio) in view of Eidson (US 2004/0047284)

Claim 1, as amended, recites that at least two pieces of the n-piece repetitive pulse trains possess lengths different from each other, wherein the repetitive pulse trains themselves constitute radio waves transmitted from an antenna. Applicant respectfully submits that Yamamoto and Eidson do not teach or suggest at least the above-noted combination of features recited in amended claim 1.

Regarding the Yamamoto reference, Applicant notes that in the Office Action, the Examiner has recognized that Yamamoto does not disclose or suggest that at least two pieces of n-piece repetitive pulse trains possess lengths different from each other (e.g., see page 8 of the Office Action).

Regarding the Eidson reference, Applicant notes that in the Office Action, the Examiner has pointed to Fig. 5 of Eidson and the disclosure therein which indicates that pilot symbols (PS) can be used with different, typically shorter, lengths and in repetition groups having varying numbers for P and J (e.g., see Office Action at page 8). As shown in Fig. 5 of Eidson, Applicant notes that this drawing illustrates the burst preamble 602, the data structure of which is shown in Fig. 6 of Eidson. With respect to Fig. 6 of Eidson, Applicant notes that this drawing illustrates a

burst communication timing structure 600 having the burst preamble 602, as well as a payload 604 which is the main element of the data and is not changed (see Fig. 6).

Based on the foregoing description of Eidson, Applicants note that while Eidson discloses that the burst preamble, which is similar to a header of the data, may be changed by varying numbers for J and P, that Eidson does not disclose or suggest that the number of radio waves is changed.

As such, Applicants respectfully submit that Eidson does not disclose or suggest the above-noted combination of features recited in amended claim 1 which set forth that at least two pieces of the n-piece repetitive pulse trains possess lengths different from each other, wherein the repetitive pulse trains themselves constitute radio waves transmitted from an antenna. Further, Applicant respectfully submits that Yamamoto does not cure these deficiencies of Eidson.

In view of the foregoing, Applicant respectfully submits that the cited prior art references do not teach, suggest or otherwise render obvious the above-noted combination of features recited in amended claim 1. Accordingly, Applicant submits that amended claim 1 is patentable over the cited prior art, an indication of which is kindly requested.

Regarding claim 2, Applicant notes that this claim has been amended to recite that at least two pieces of the n-piece repetitive pulse trains possess lengths different from each other, wherein the repetitive pulse trains themselves constitute radio waves transmitted from an antenna.

For at least similar reasons as discussed above with respect to claim 1, Applicant respectfully submits that Yamamoto and Eidson do not teach, suggest or otherwise render obvious the above-noted features recited in claim 2. Accordingly, Applicant submits that claim 2 is patentable over the cited prior art, an indication of which is kindly requested.

Regarding claim 3, Applicant notes that this claim has been amended to recite that at least two pieces of the n-piece repetitive pulse trains are composed of repetitive pulses of different numbers, wherein the repetitive pulse trains themselves constitute radio waves transmitted from an antenna.

For at least similar reasons as discussed above with respect to claim 1, Applicant respectfully submits that Yamamoto and Eidson do not teach, suggest or otherwise render obvious the above-noted features recited in claim 3. Accordingly, Applicant submits that claim 3 is patentable over the cited prior art, an indication of which is kindly requested. Claims 4-11 depend from claim 3 and are therefore patentable at least by virtue of their dependency.

Regarding claim 12, Applicant notes that this claim has been amended to recite that at least two pieces of the n-piece repetitive pulse trains possess lengths different from each other, wherein the repetitive pulse trains themselves constitute radio waves transmitted from an antenna.

For at least similar reasons as discussed above with respect to claim 1, Applicant respectfully submits that Yamamoto and Eidson do not teach, suggest or otherwise render obvious the above-noted features recited in claim 12. Accordingly, Applicant submits that claim 12 is patentable over the cited prior art, an indication of which is kindly requested.

Regarding claim 13, Applicant notes that this claim has been amended to recite that at least two pieces of the n-piece repetitive pulse trains are composed of repetitive pulses of different numbers, wherein the repetitive pulse trains themselves constitute radio waves transmitted from an antenna.

For at least similar reasons as discussed above with respect to claim 1, Applicant respectfully submits that Yamamoto and Eidson do not teach, suggest or otherwise render

obvious the above-noted features recited in claim 13. Accordingly, Applicant submits that claim 13 is patentable over the cited prior art, an indication of which is kindly requested.

II. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may best be resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

Respectfully submitted,

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